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The Dempster Lateral

Gas Pipeline Project

FOOTHILLS PIPE LINES (YUKON) LTD.

- 79D24 FOLIO

DEMPSTER LATERAL GAS PIPELINE ENVIRONMENTAL IMPACT ATLAS VOLUME 5

INTRODUCTION

The Environmental Impact Atlas displays the pipeline route and associated facilities and provides an overview of the environmental setting along the pipeline route for fish, birds, mammals, historic resources, and land and resource use. The maps graphically illustrate the areas of conflict between different environmental components and the Dempster Lateral Gas Pipeline Project. Predicted environmental impacts are identified at the base of each map and defined according to environmental component affected, dominant concerns, and predicted duration, location and level of impact. The environmental setting and predicted impacts are addressed in greater detail in the Environmental Impact Statement (Volume 4).

The atlas is comprised of:

MAP SET I — Fish and Wildlife
MAP SET II — Historic Resources and Land and Resource Use

MAP SET I - FISH AND WILDLIFE

MAP SET I illustrates the environmental setting with respect to select species of fish, birds and mammals found along the pipeline route. In order to facilitate an objective assessment of projectrelated impacts upon these species, duration and level of predicted impacts have been categorized and defined as follows:

A long-term impact upon fish and wildlife species or populations would be sustained over an extended period of time, often affecting many generations of the species or population concerned. The effect of a short-term impact would be temporary, affecting few generations or age classes.

Level of Impact

A major impact on fish is one which jeopardizes the existence of a population or adversely affects rare or endangered lifeforms. A moderate impact is one which adversely affects a population; this effect would be localized.

A major impact upon wildlife is one which changes the population size in excess of expected natural population fluctuations and jeopardizes its existence, or adversely affects rare or endangered species. A moderate impact is one which could change the population's size within the range of natural fluctuations that occurs infrequently and from which the population has recovered in the past or is expected to have the ability to recover.

FISH

The atlas identifies the type of habitat utilization which occurs during the period in which disturbance will take place in streams along the pipeline route. Habitat uses include spawning, nursery, overwintering and migration.

The following species are considered:

Oncorhynchus tshawytscha Chinook salmon Oncorhynchus keta Chum salmon Thymallus arcticus Arctic grayling Lake trout Salvelinus namaycush Lake whitefish Coregonus clupeaformis Broad whitefish Coregonus nasus Arctic cisco Coregonus autumnalis Inconnu Stenodus leucichthys Northern pike Esox lucius

Burbot Lota lota

Lake whitefish, broad whitefish, Arctic cisco and inconnu have been referred to collectively as coregonids.

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WILDLIFE

The mammal and bird species considered in the following map set include the following:

Moose Alces alces Dall's sheep Ovis dalli Grizzly bear Ursus arctos

Woodland caribou Rangifer tarandus caribou Rangifer tarandus granti Barren ground caribou Flk Cervus elaphus

Golden Eagle Aquila chrysaetos Bald Eagle Haliaeetus leucocephalus Falco peregrinus Peregrine Falcon Gyrfalcon Falco rusticolus Waterfowl numerous species

All ducks, geese and swans are collectively referred to as waterfowl. Similarly, Golden Eagle, Bald Eagle, and Gyrfalcon are collectively indicated as raptors. Peregrine Falcon, however, is specificially noted as a rare and endangered species.

The information presented indicates areas of important habitat and habitat utilization (e.g., breeding, moulting, staging) or season during which use occurs (e.g., winter, year-round).

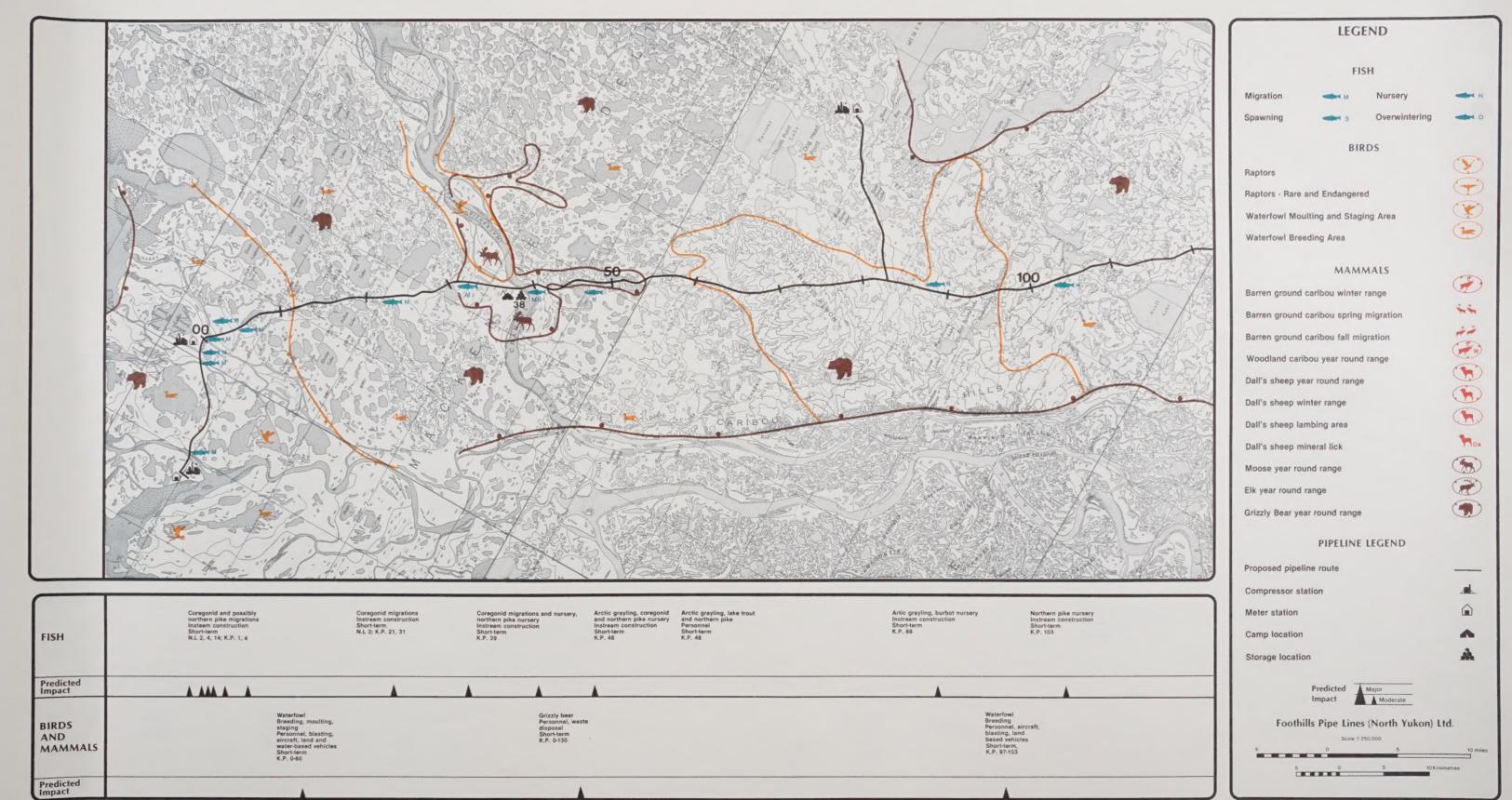
Principal Information Sources

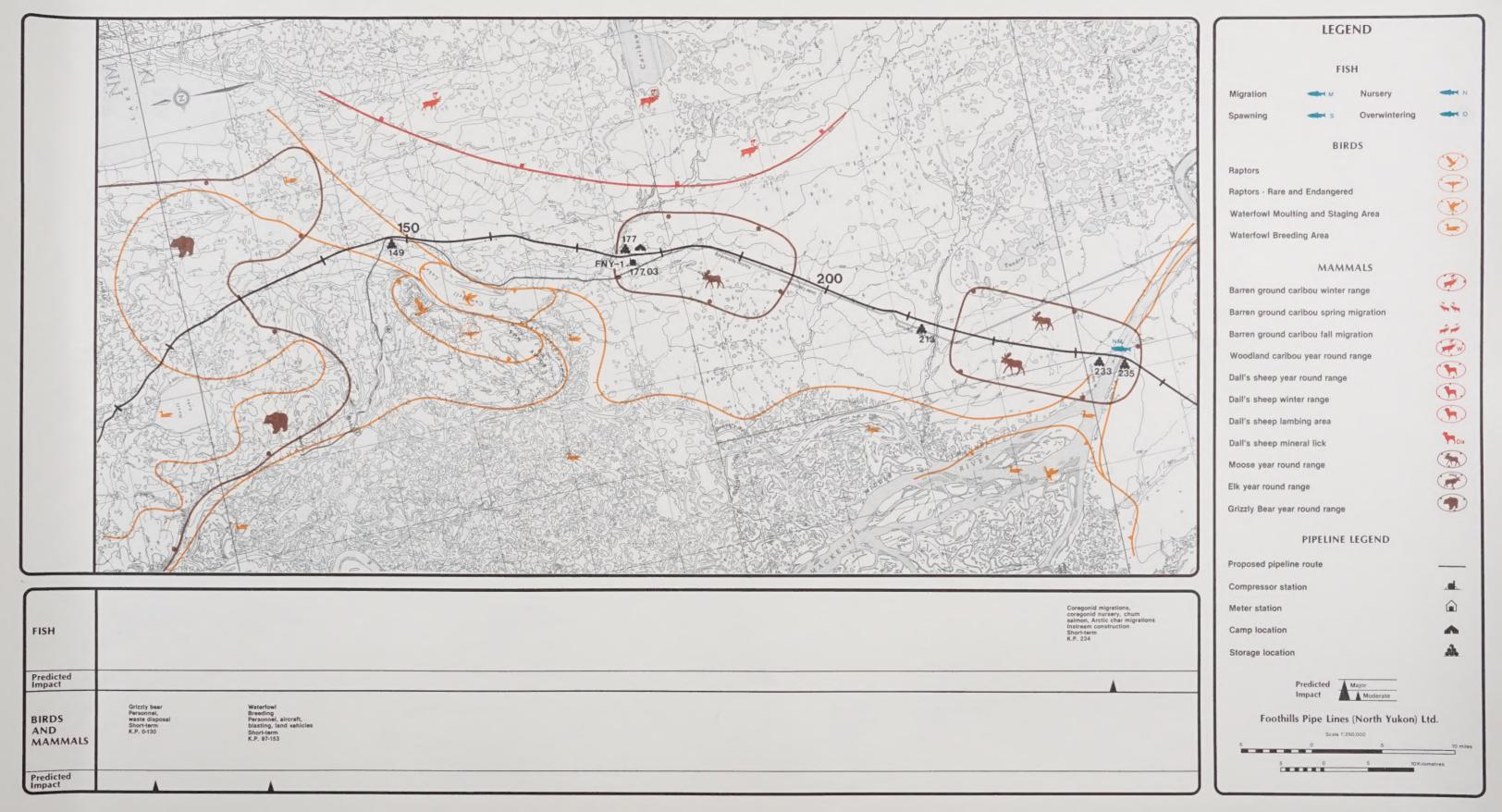
MAMMALS

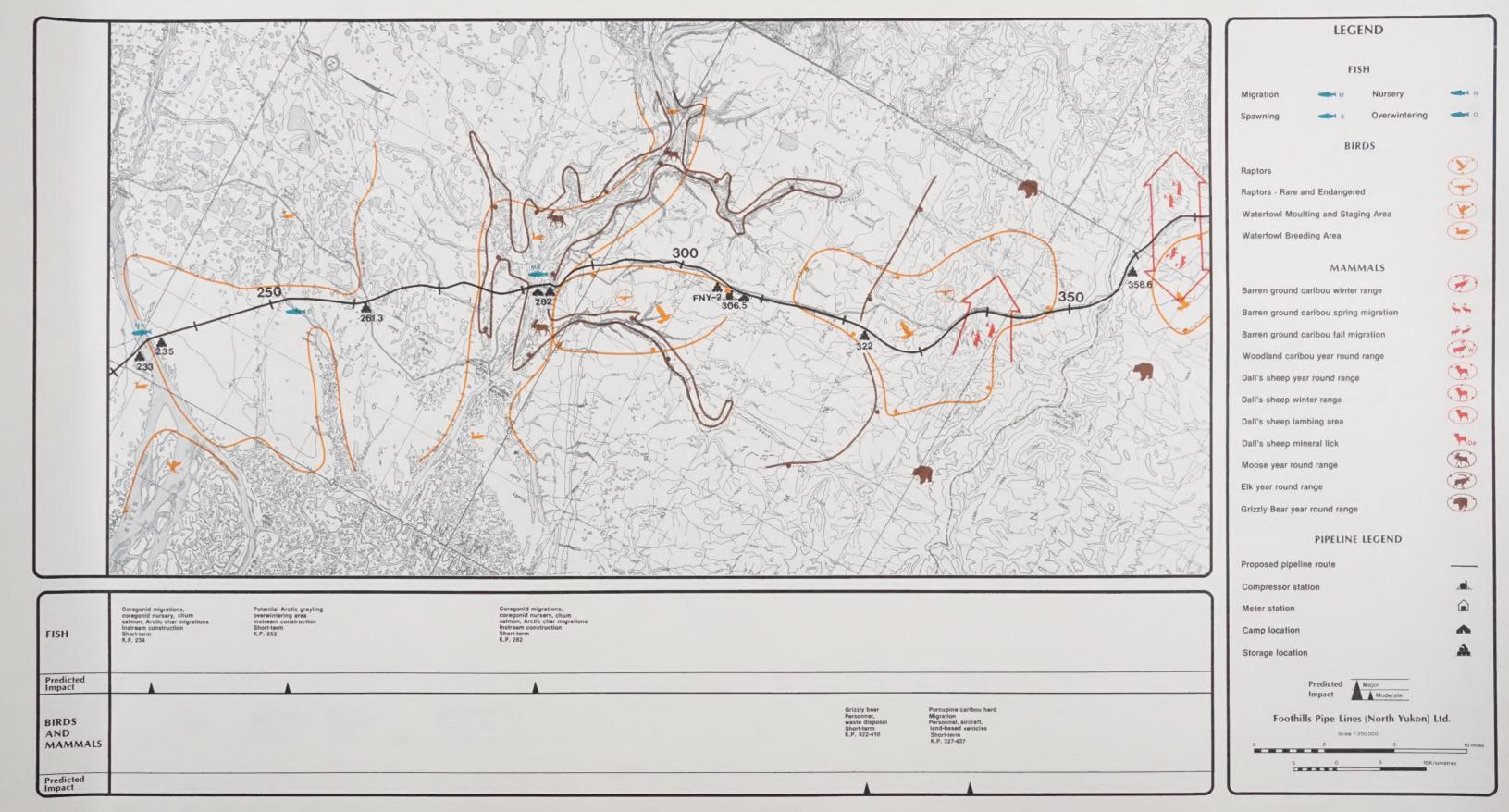
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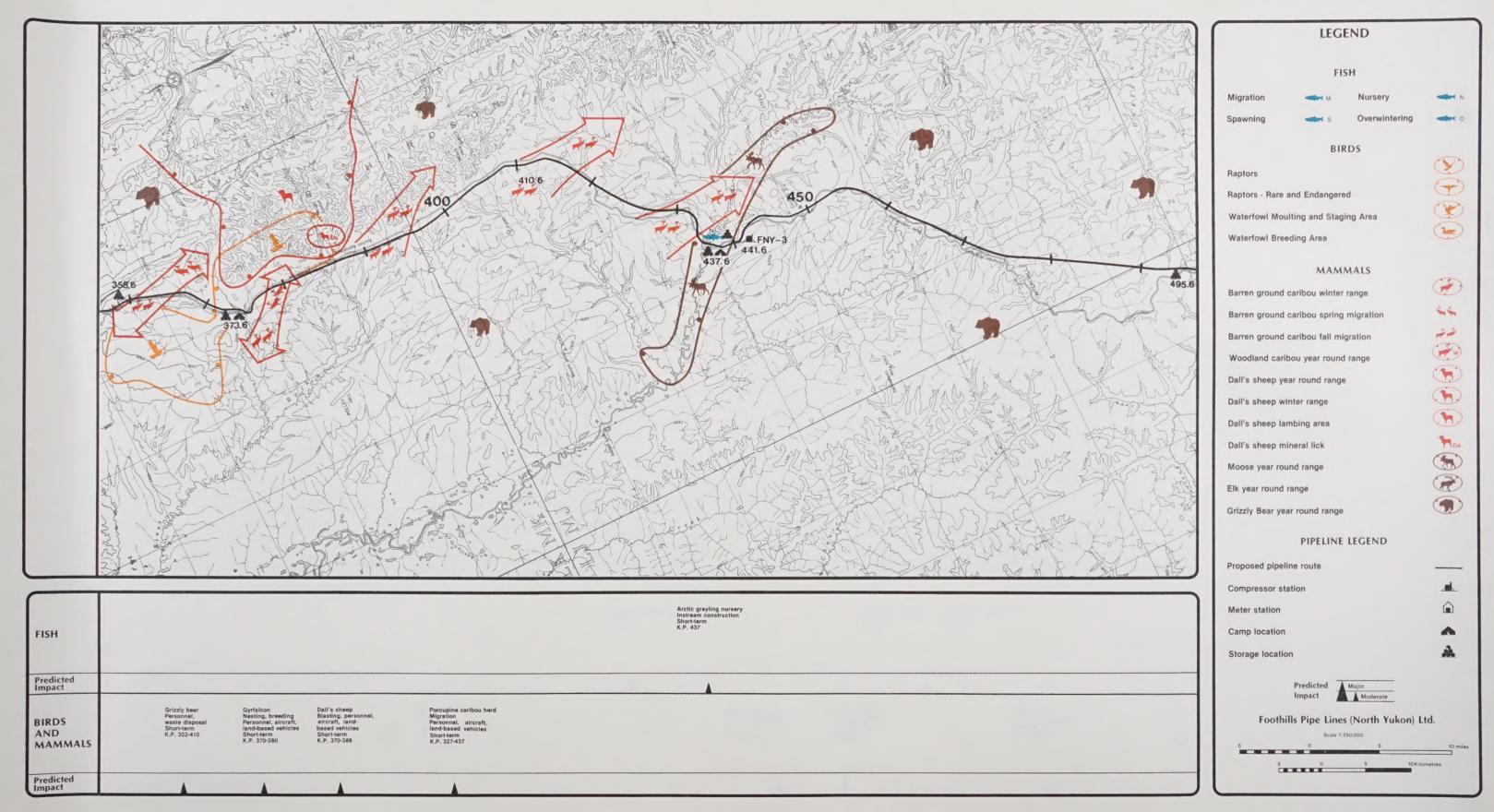
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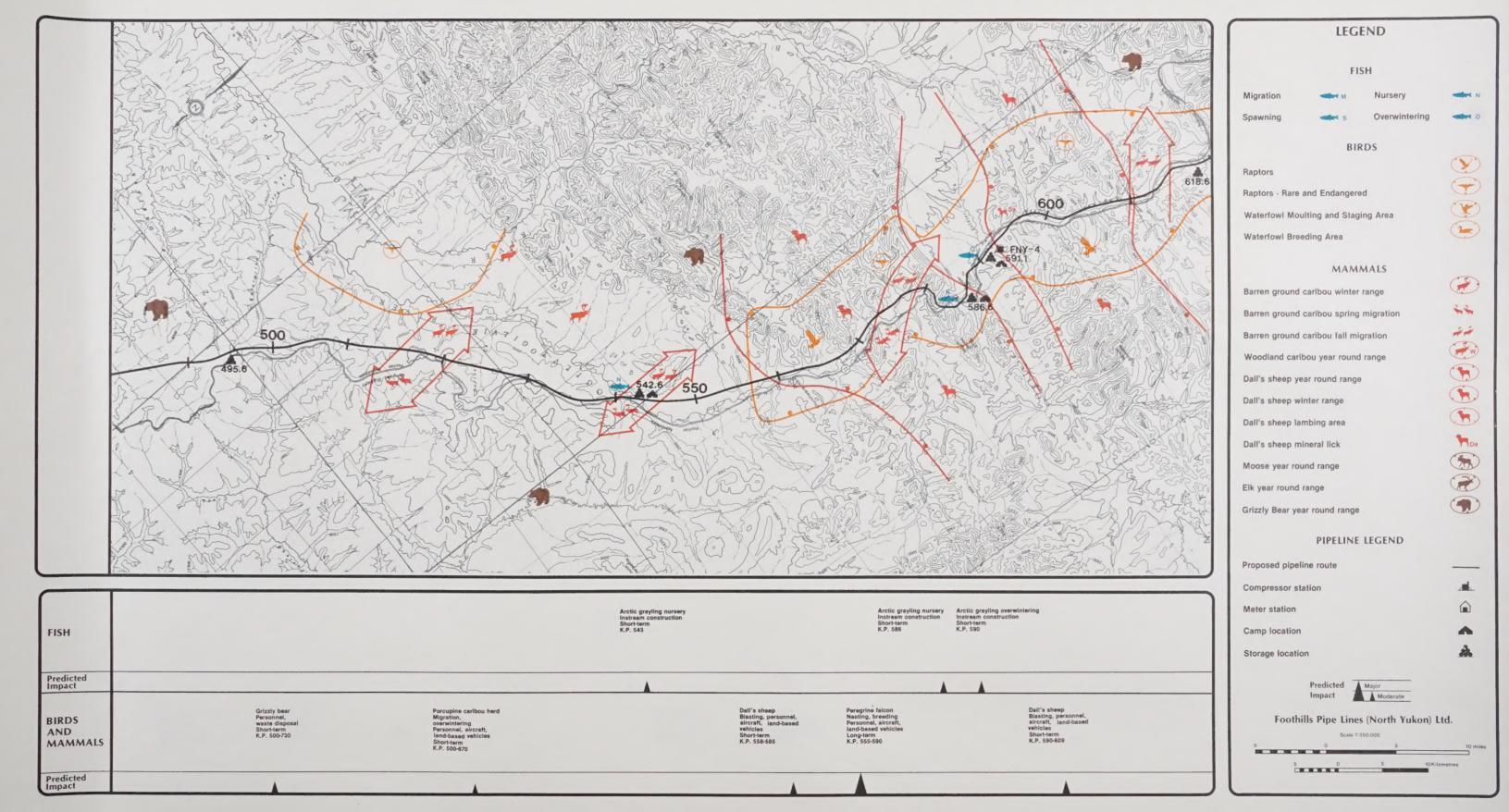
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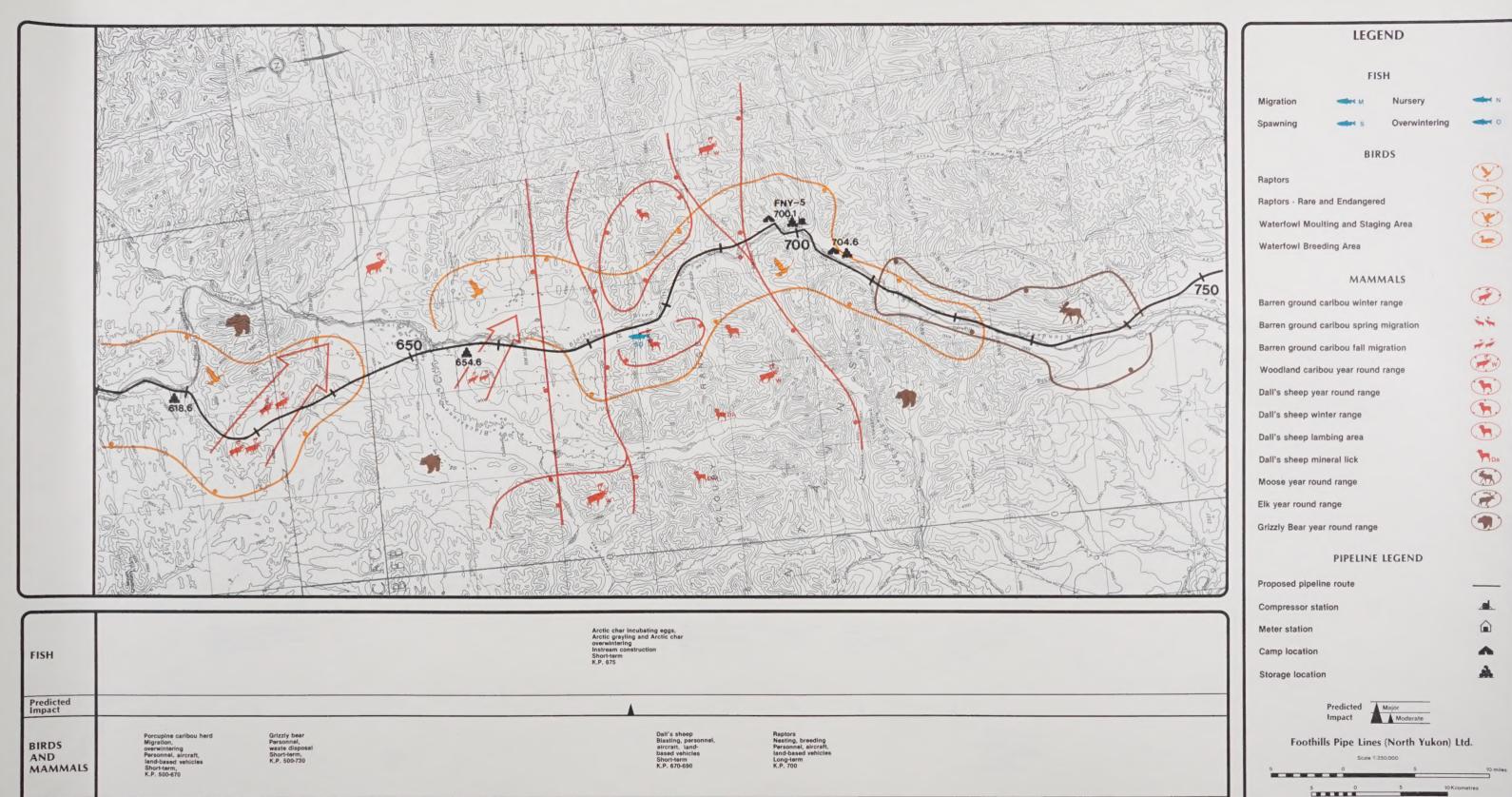




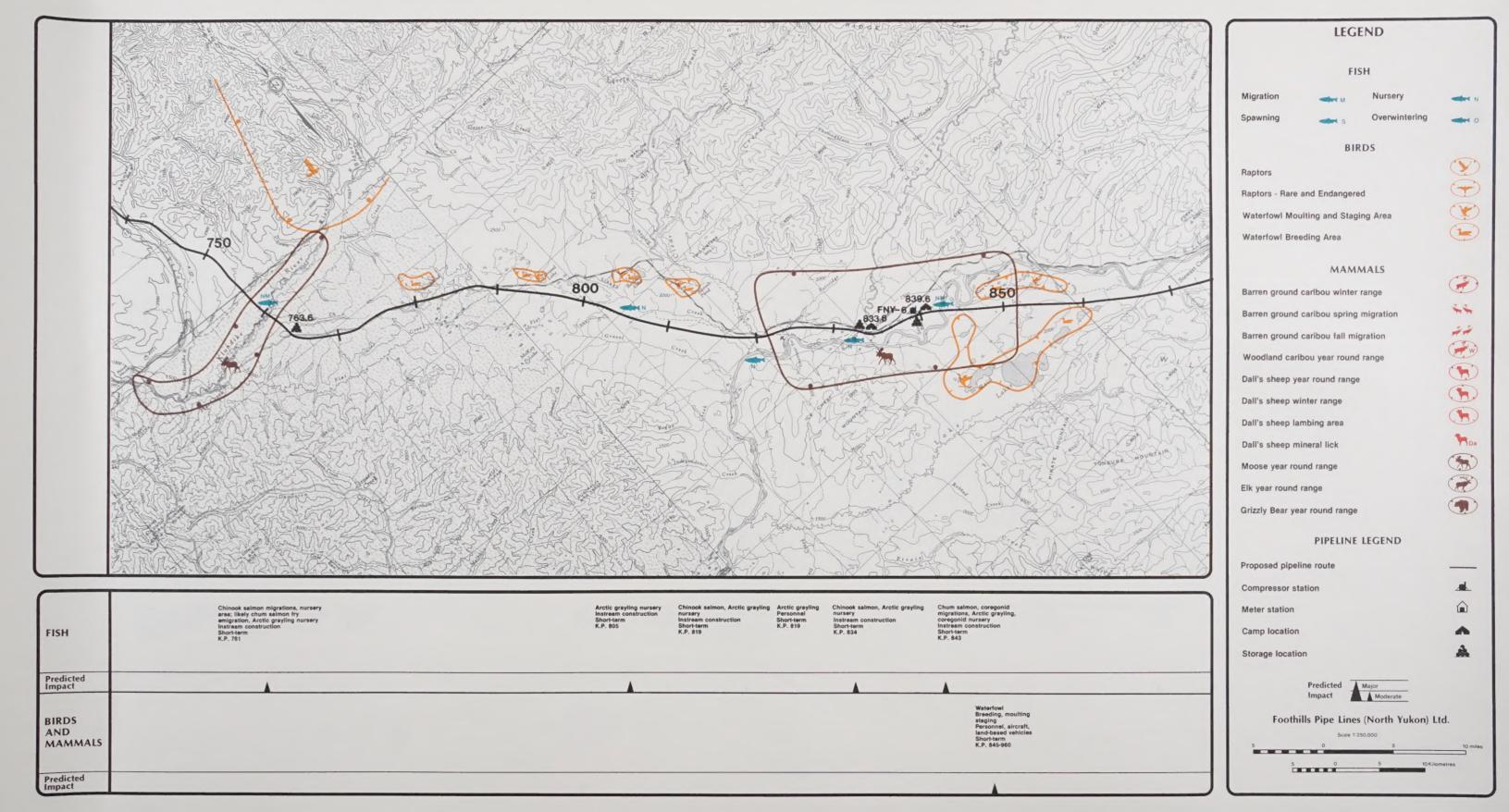


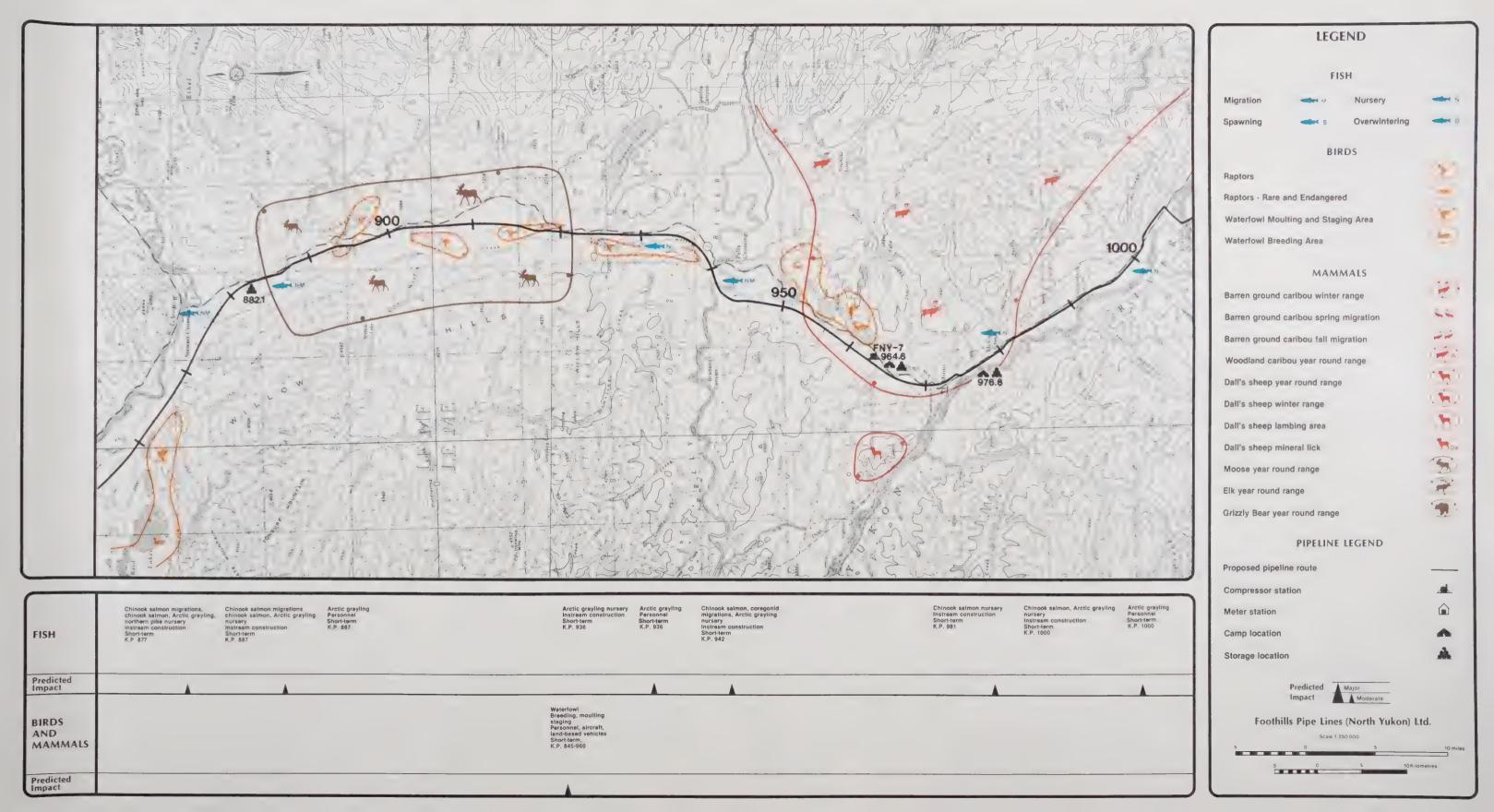


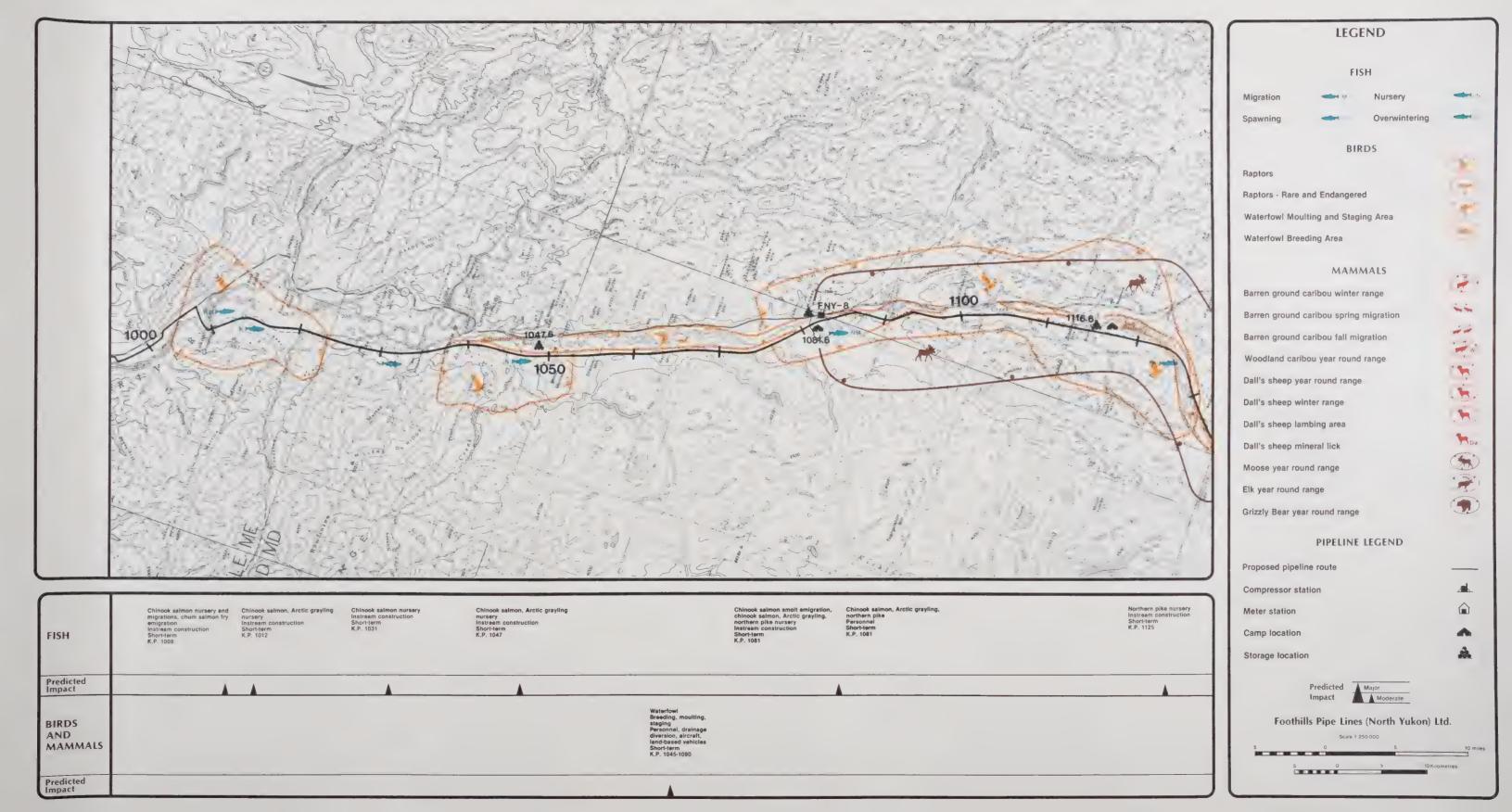


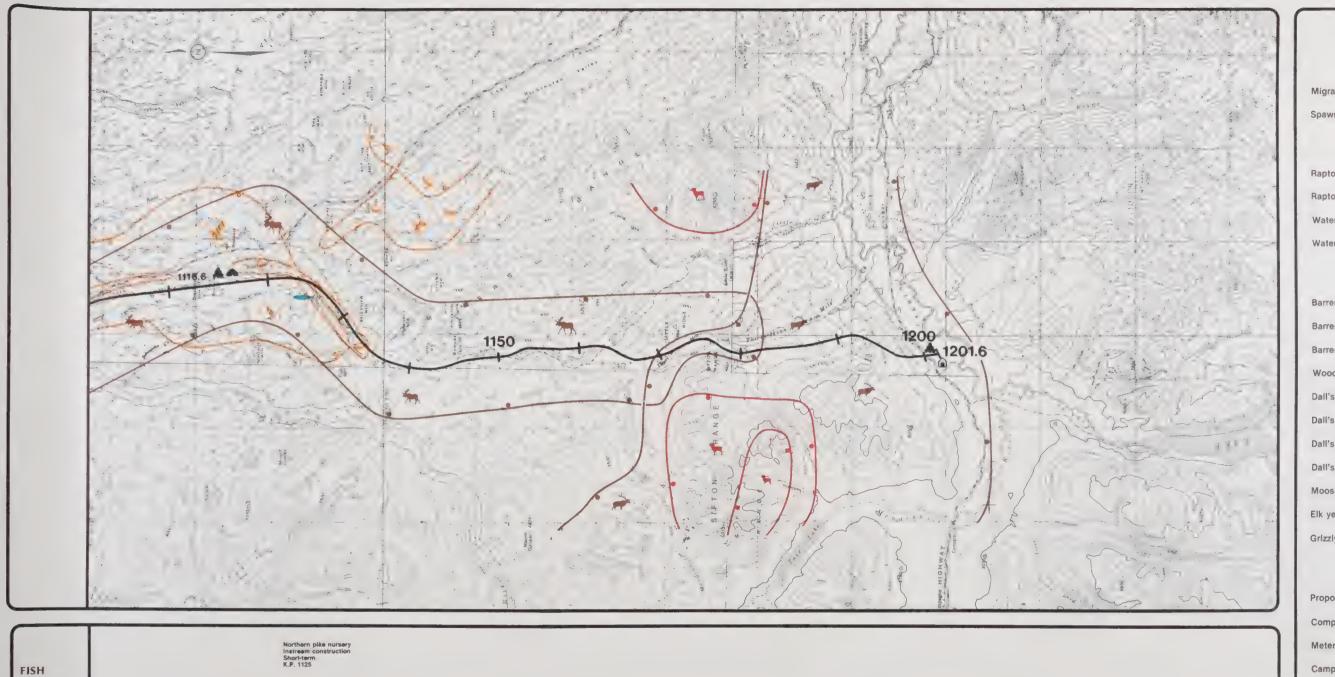


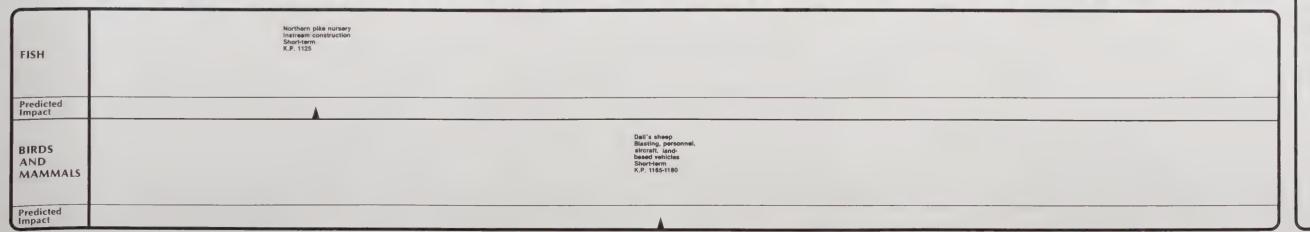
Predicted Impact













MAP SET II — HISTORIC RESOURCES AND LAND AND RESOURCE USE

MAP SET II of the Environmental Impact Atlas illustrates select historic resources and land and resource uses along the pipeline route. In order to facilitate an objective assessment of project-related impacts upon these resources, duration and level of predicted impacts have been categorized and defined as follows

Duration of Impact

The effect of a long-term impact upon historic resources and land and resource use, would extend for more than 5 years. A short-term impact would endure for less than 5 years.

Level of Impact

A major impact upon historic resources is one which precludes interpretation of the disturbed material concerned or eliminates its value. A moderate impact is one which limits interpretation of the disturbed material or significantly reduces its value.

A major impact upon land and resource use is one which precludes long-term significant or productive options. A moderate impact is one which precludes short-term use or interfers—with continued use

HISTORIC RESOURCES

Historic resource sites which occur within the influence of the project have been identified on the Environmental Impact Atlas Historic resources have been subdivided into three categories Euro-Canadian, Native Canadian, and Prehistoric Site types include: open graves, cemeteries, village sites, camps/campsites, road houses, lookouts, diversion flues, and isolated finds

Principal Information Sources

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LAND AND RESOURCE USE

The atlas maps depict locations of existing land and resource use within an 8 km corridor centred on the pipeline route

Areas which offer a variety of possible recreational pursuits such as sport fishing, sport hunting, camping or hiking, and have a good potential for future development, have been designated as potential recreation areas. Organized campgrounds are existing camping areas which offer some facilities such as tables and piped-in water

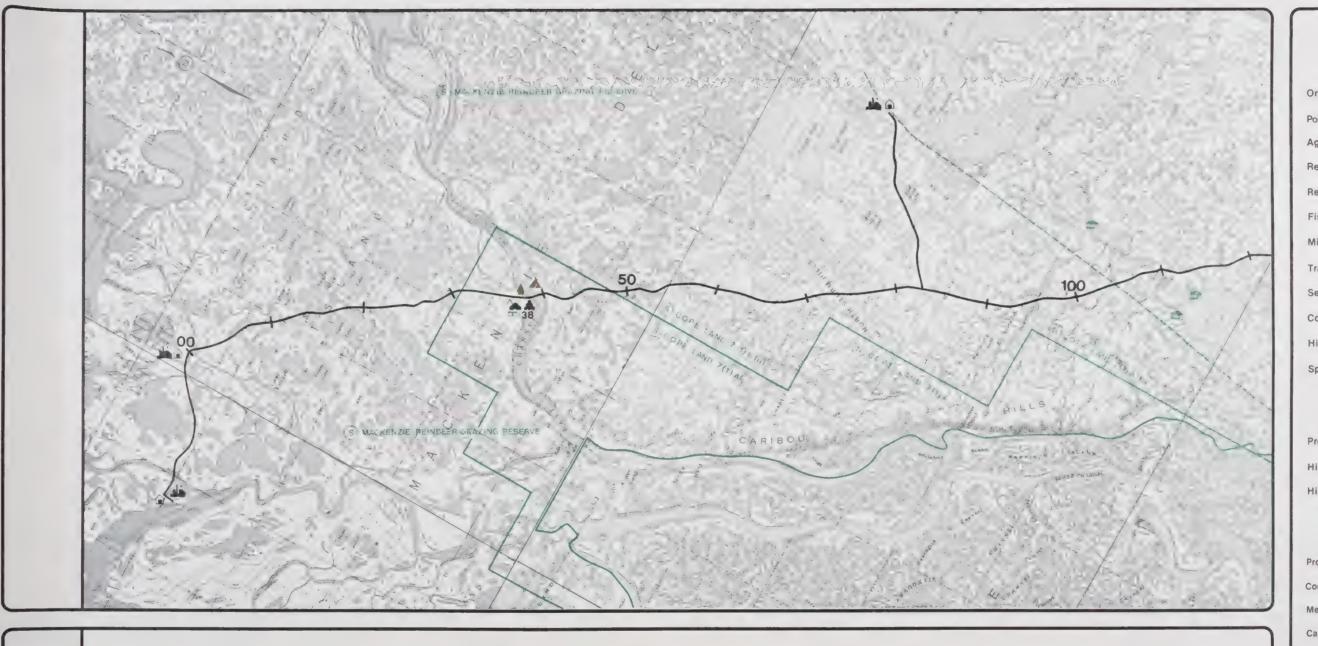
Hunting and trapping areas indicated are those which are used on a regular basis for recreational, domestic or commercial purposes As hunting activity is characteristically undertaken along highways and navigable waterways, only those areas of special importance are noted. Areas, however, within the jurisdiction of the Dempster Highway Area Development Ordinance are excluded as important hunting areas as discharge of firearms is prohibited. Commercial, domestic and sport fisheries are also indicated.

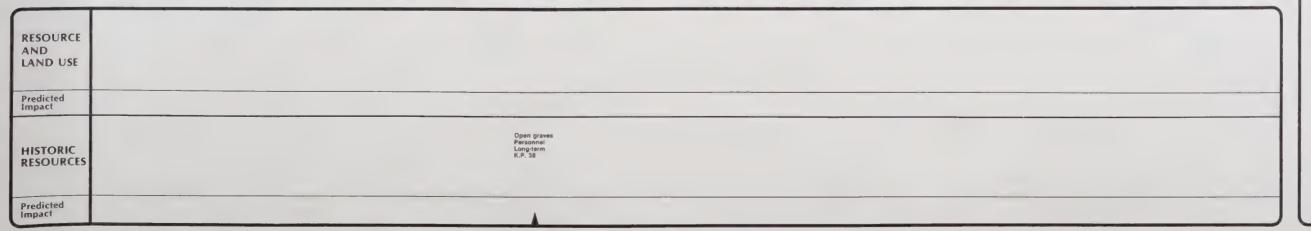
Residential occupancy sites are indicated, including those cabins used for trapping and recreational purposes. Commercial sites indicated include motels, restaurants, service stations, stores, out-fitter base camps and industrial facilities. The locations of mineral claims, Yukon Territorial Government highway maintenance camps, and agricultural and grazing land are also shown.

Areas designated as having special status include Committee for Original Peoples' Entitlement (COPE) claimed lands, Department of Indian Affairs and Northern Development (DIAND) Indian Reservations, Yukon Territorial Government proposed development sites and resource reserves. In addition, proposed park locations and International Biological Programme (IBP) sites are indicated as areas of special status.

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LEGEND **RESOURCE AND LAND USE** Organized Campgrounds Potential Recreation Areas Agriculture and Grazing Land Regularly Used Hunting Areas Regularly Used Trapping Areas Fish Harvesting Mines, Minerals and Placer Claims . . Transmission Line A .c Seasonal and Residential Occupancy Sites Commerical and Industrial Facilities p. ... **Highway Maintenance Facilities** Special Land Status HISTORIC RESOURCES Prehistoric Sites **Historic Native Sites** Historic Euro-Canadian Sites PIPELINE LEGEND Proposed pipeline route Camp location

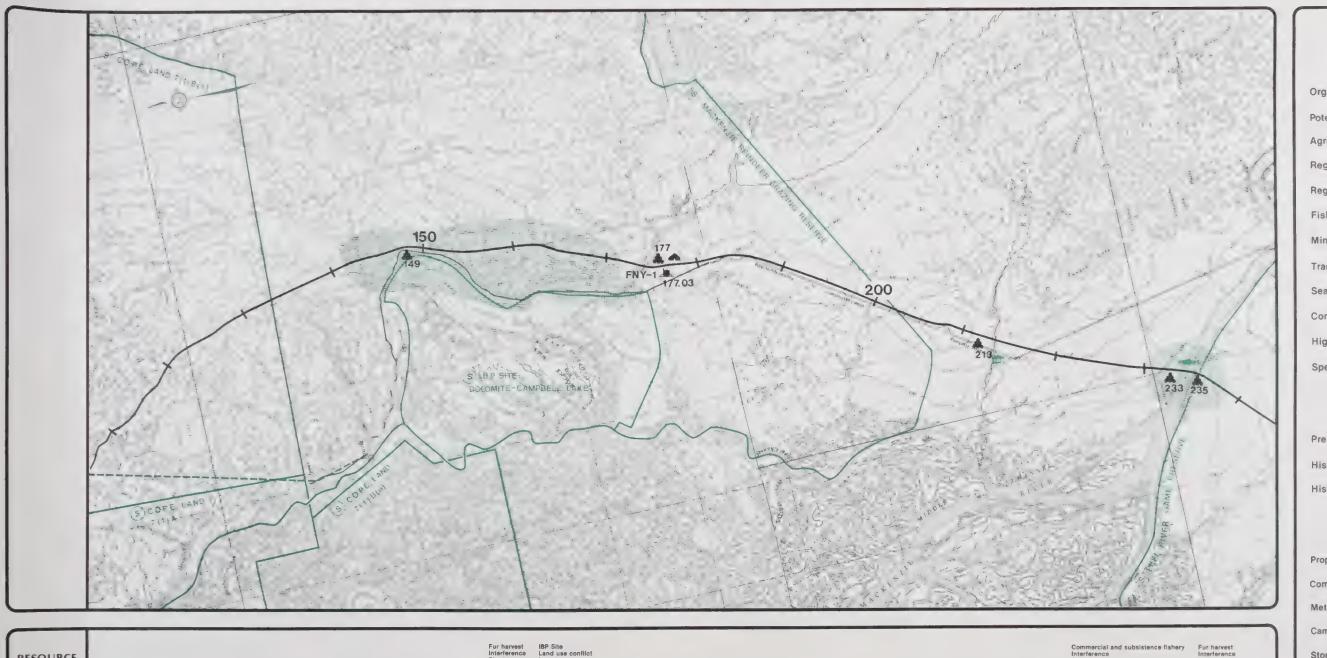
Compressor station Meter station

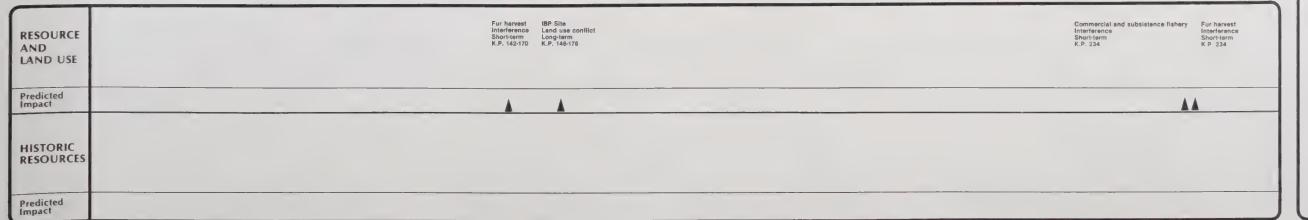
Storage location



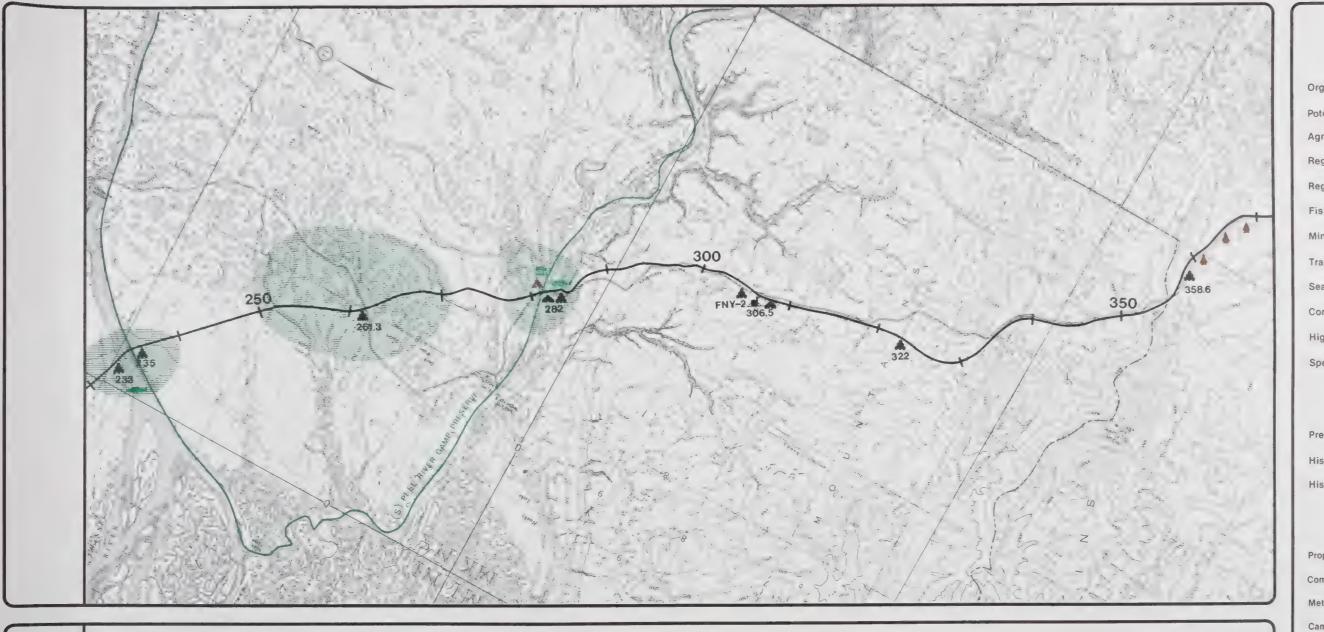
Foothills Pipe Lines (North Yukon) Ltd.







LEGEND **RESOURCE AND LAND USE** Organized Campgrounds Potential Recreation Areas Agriculture and Grazing Land Regularly Used Hunting Areas Regularly Used Trapping Areas Fish Harvesting Mines, Minerals and Placer Claims Transmission Line Seasonal and Residential Occupancy Sites Commerical and Industrial Facilities Highway Maintenance Facilities Special Land Status HISTORIC RESOURCES Prehistoric Sites **Historic Native Sites** Historic Euro-Canadian Sites PIPELINE LEGEND Proposed pipeline route Compressor station Meter station Camp location Storage location Predicted Major Impact Moderate Foothills Pipe Lines (North Yukon) Ltd.





LEGEND

RESOURCE AND LAND USE

Organized Campgrounds

Potential Recreation Areas

Agriculture and Grazing Land

Regularly Used Hunting Areas

Regularly Used Trapping Areas

Fish Harvesting

Mines, Minerals and Placer Claims

Transmission Line

Seasonal and Residential Occupancy Sites

Commerical and Industrial Facilities

Highway Maintenance Facilities

Special Land Status

HISTORIC RESOURCES

Prehistoric Sites

Historic Native Sites

Historic Euro-Canadian Sites

PIPELINE LEGEND

Proposed pipeline route

Compressor station

Meter station

Camp location

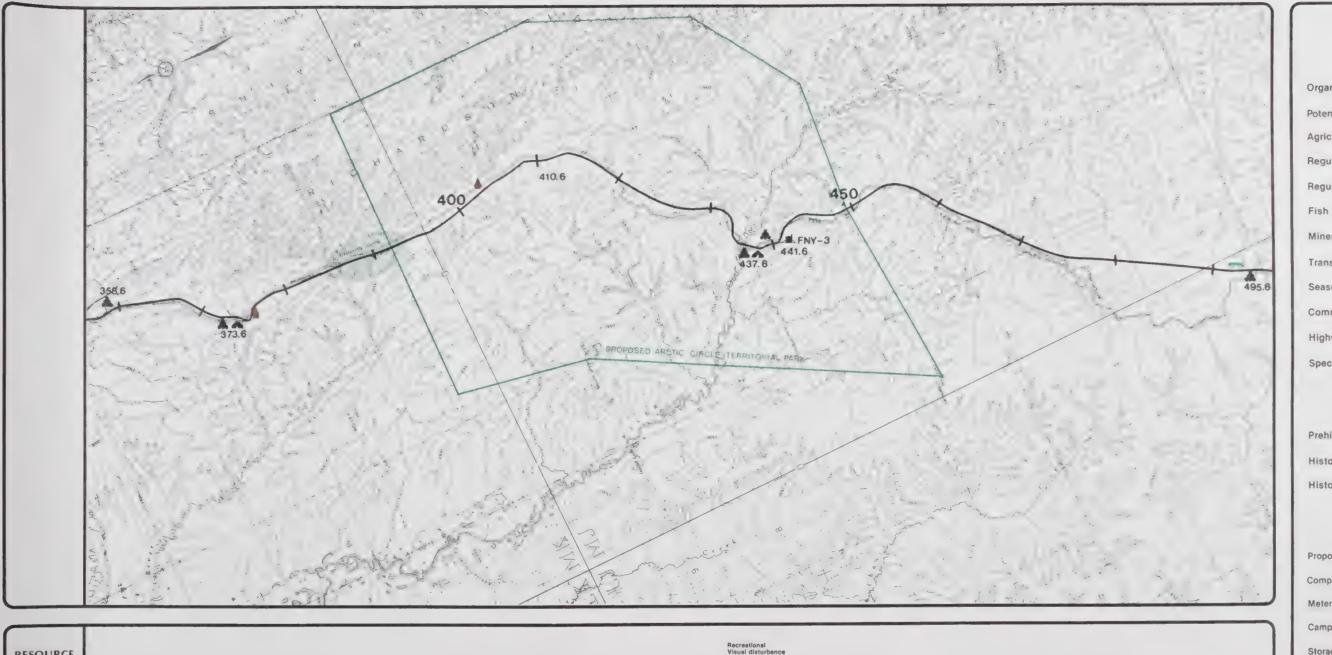
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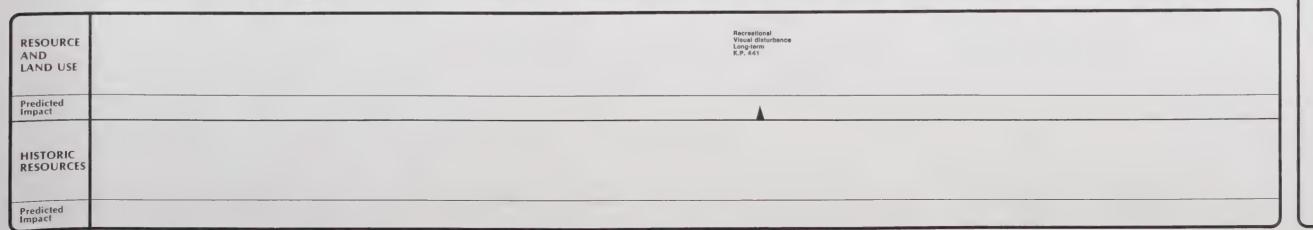
Predicted



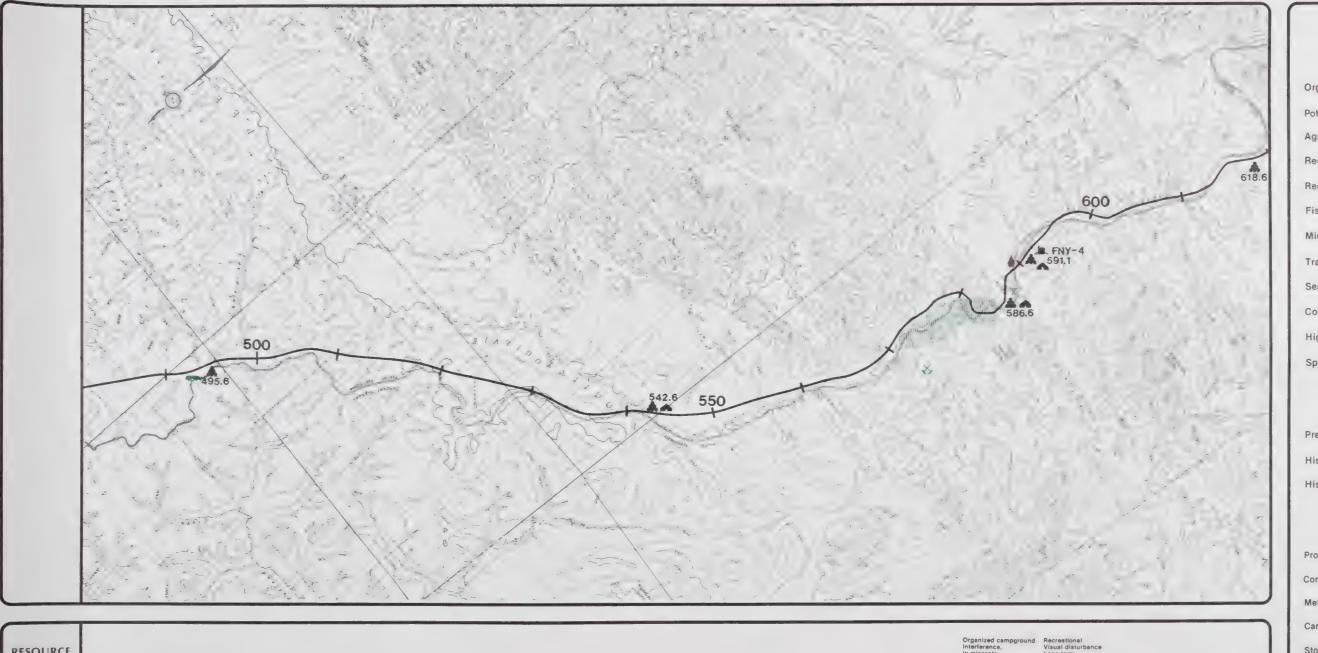
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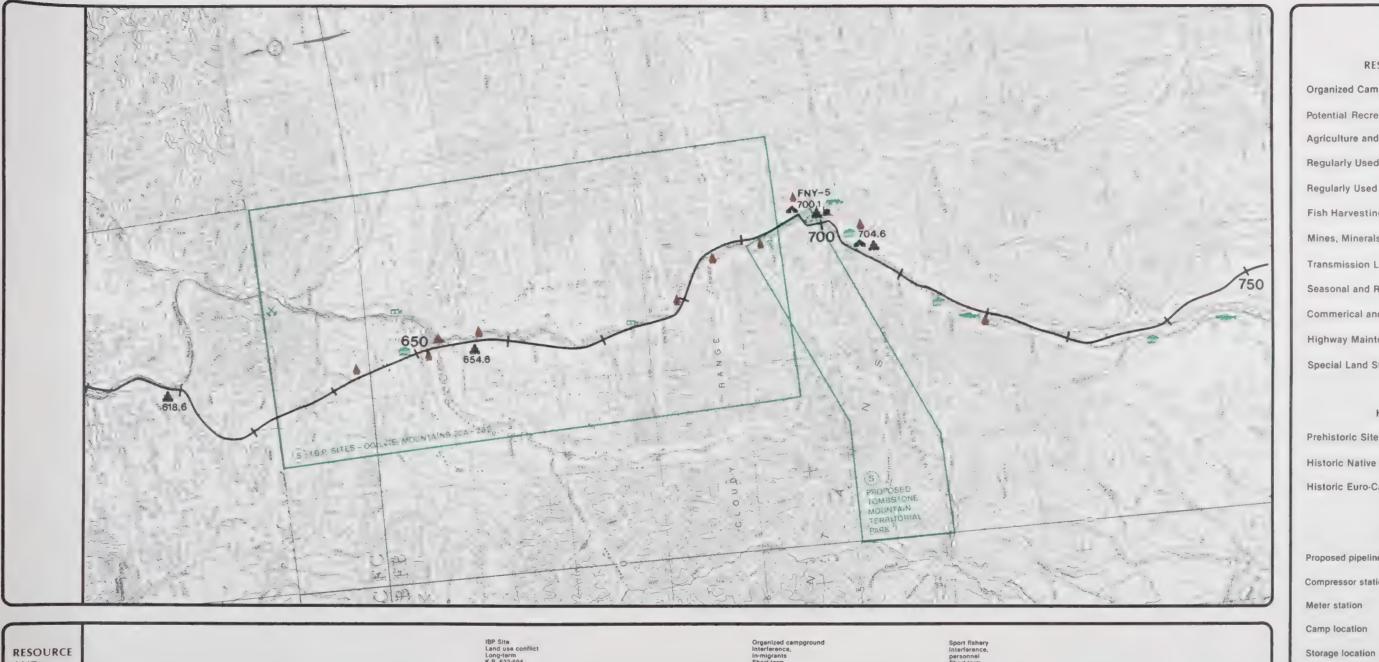


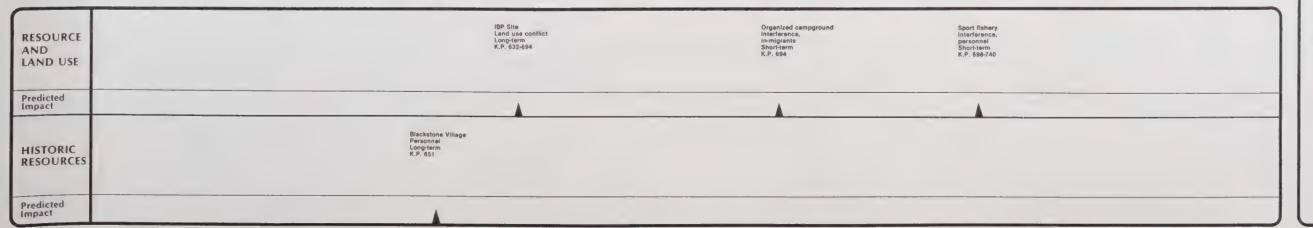
LEGEND RESOURCE AND LAND USE Organized Campgrounds Potential Recreation Areas Agriculture and Grazing Land Regularly Used Hunting Areas Regularly Used Trapping Areas Fish Harvesting Mines, Minerals and Placer Claims Transmission Line -Seasonal and Residential Occupancy Sites Commerical and Industrial Facilities **Highway Maintenance Facilities** Special Land Status HISTORIC RESOURCES Prehistoric Sites **Historic Native Sites** Historic Euro-Canadian Sites PIPELINE LEGEND Proposed pipeline route Compressor station Meter station Camp location Storage location Foothills Pipe Lines (North Yukon) Ltd.



RESOURCE AND LAND USE	Organized campground Recreational Interference, Visual disturbance In-migrants Long-tem Short-term K.P. 591 K.P. 586
Predicted Impact	A A
HISTORIC RESOURCES	
Predicted Impact	

LEGEND RESOURCE AND LAND USE Organized Campgrounds Potential Recreation Areas Agriculture and Grazing Land Regularly Used Hunting Areas Regularly Used Trapping Areas Fish Harvesting Mines, Minerals and Placer Claims Transmission Line Seasonal and Residential Occupancy Sites Commerical and Industrial Facilities Highway Maintenance Facilities Special Land Status HISTORIC RESOURCES Prehistoric Sites **Historic Native Sites** Historic Euro-Canadian Sites PIPELINE LEGEND Proposed pipeline route Compressor station Meter station Camp location Storage location Foothills Pipe Lines (North Yukon) Ltd.





LEGEND

RESOURCE AND LAND USE

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Organized Campgrounds Potential Recreation Areas Agriculture and Grazing Land Regularly Used Hunting Areas Regularly Used Trapping Areas Fish Harvesting Mines, Minerals and Placer Claims Transmission Line Seasonal and Residential Occupancy Sites Commerical and Industrial Facilities **Highway Maintenance Facilities** Special Land Status HISTORIC RESOURCES Prehistoric Sites Historic Native Sites Historic Euro-Canadian Sites

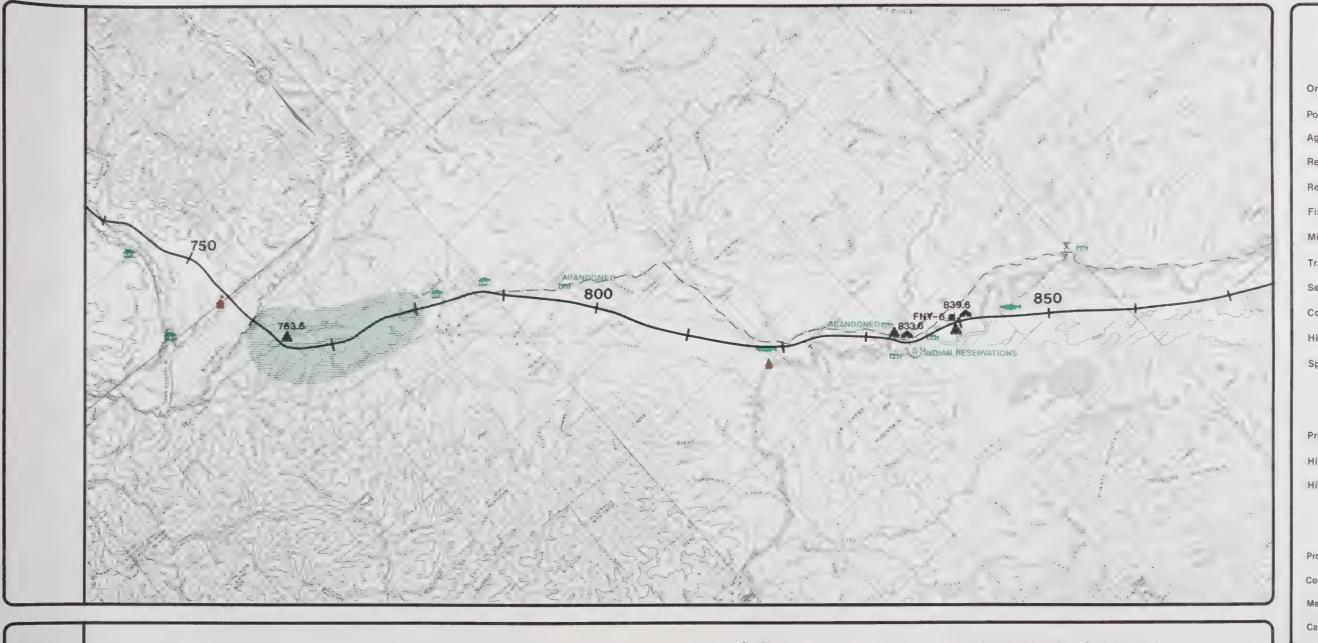
PIPELINE LEGEND

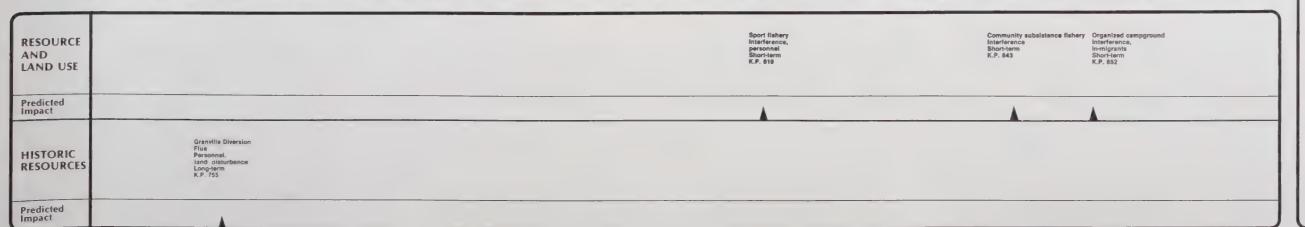
Proposed pipeline route Compressor station Meter station Camp location



Foothills Pipe Lines (North Yukon) Ltd.







LEGEND RESOURCE AND LAND USE Organized Campgrounds Potential Recreation Areas Agriculture and Grazing Land Regularly Used Hunting Areas Regularly Used Trapping Areas Fish Harvesting Mines, Minerals and Placer Claims Transmission Line Seasonal and Residential Occupancy Sites Commerical and Industrial Facilities Highway Maintenance Facilities Special Land Status HISTORIC RESOURCES Prehistoric Sites **Historic Native Sites** Historic Euro-Canadian Sites PIPELINE LEGEND Proposed pipeline route Compressor station Meter station Camp location Storage location Foothills Pipe Lines (North Yukon) Ltd.

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